

well-known structure of the Daphnidæ, and their peculiarities thus completely explained morphologically. The principal difference which leads physiologically to new conditions of embryonic nourishment, and is also of importance with regard to the external form of the body, consists in the transformation of the brood-chamber, bounded by the skin of the back and the inferior lamella of the shell, into a uterus-like sac, the cellular wall of which (*hypodermis*) becomes a nutrient organ of the ova and embryos, either throughout its whole extent (*Podon*, *Evadne*), or only in the ventral lamella, which is in contact with the intestine.

The nervous system could be traced in its whole course in all four genera. The brain is followed by a subcesophageal ganglion, which is united to it by short broad cesophageal commissures, and by the ventral ganglionic chain, the four inflations of which, united by transverse commissures, emit nerves for the limbs. The last and smallest pair of ganglia also sends forth nerves to the abdomen and to the tactile setæ of the postabdomen.

The crystalline cones of the large movable eye consist throughout of five segments; the nervous rods belonging to them show lamellar structure.

The shell-gland was traced in all the genera in its whole length to its orifice. In its course it presents characteristic peculiarities in each genus and species, but consists throughout of the ampulliform sac, the inner and outer looped canal, the terminal duct, and the short narrow efferent tube. The dilated terminal duct, extended after the fashion of a reservoir, contains large shining urinary concretions in *Podon* and *Evadne*.

The adherent organ of *Evadne* and *Podon* is not a sucking-cup with radiating muscles, but an excretory organ composed of large glandular cells with streaky protoplasm. In *Evadne* nine or ten cells are usually employed in its formation; their conically decreased secreting ends are applied to the well-known cuticular disk.

The ova, as in the Daphnidæ, are produced in four-celled chambers of the ovary, but are extraordinarily small when they pass into the brood-chamber, where an abundant supply of nourishment is furnished to the developing embryo by secretion from the walls. In *Evadne* the embryo becomes pregnant while still in the body of the mother, and is usually born with four ova in process of segmentation in the uterus.

The formation of the winter egg in *Evadne* takes place by absorption-processes of the neighbouring egg-chamber.—*Kais. Akad. der Wiss. in Wien*, Oct. 26, 1876.

*On the Colydiidæ of New Zealand.* By D. SHARP.

In the 'Annals,' July 1876, p. 22, I established a new genus of Colydiidæ, with the name *Epistrophus*. I find this word has already been used by Kirsch for a genus of Curculionidæ; and I propose therefore for the genus of Colydiidæ above alluded to the name of *Epistranus* in place of *Epistrophus*.